Ketchikan Ward Creek Bridge No. 747 Replacement

PUBLIC SCOPING OPEN HOUSE

Thursday, April 25, 2024, 6pm –8pm
Ted Ferry Civic Center, Ketchikan

OPEN HOUSE PURPOSE

- Provide an overview of the Ketchikan Ward Creek Bridge No. 747 Replacement Project
- Gather input from the community on the proposed project.

TODAY'S FORMAT

It's an open house – sign in and visit the stations to learn more about the project. You can provide input by speaking with the project team

Station #1: Welcome and Sign In

- **Please sign in** before making your way around the room
- Provide written comments today, or later via email, the website comment submission form, or mail

Station #2: Project Need

- Review the overall scope of the project.
- Learn about the project's purpose and need.
- Discuss the choice to replace the bridge rather than repair it.

Station #3: Project Concepts: Layout

- Review and discuss the potential bridge layouts analyzed by the project team.

Station #4: Project Concepts: Bridge Type

- Review and discuss the potential bridge types analyzed by the project team.

Station #5: Project Constraints

- Review the many constraints that inform and shape the project area.

Station #6: Traffic Management

- Review the conceptual phases of construction and associated traffic control plans.

Station #7: Project Cost and Schedule

- View a schedule of the project's next steps, and review the project budget.

VISIT THE PROJECT WEBSITE TO:

- Comment on the project
- Sign up for the project mailing list
- View the project area
- Contact the project team

Project Website: dot.alaska.gov/sereg/projects/ward-creek-bridge

Ward Creek Bridge Replacement Project Area

Station 2: Project Need

The project is needed because:

- Ward Creek Bridge was constructed in 1950 and 1975 and is nearing the end of its useful life.
- It has documented differential settlement of the north abutment.
- Roadway approach geometry does not meet current design standards.
- New bridge user groups are now present that were not accounted for in the existing bridge design.

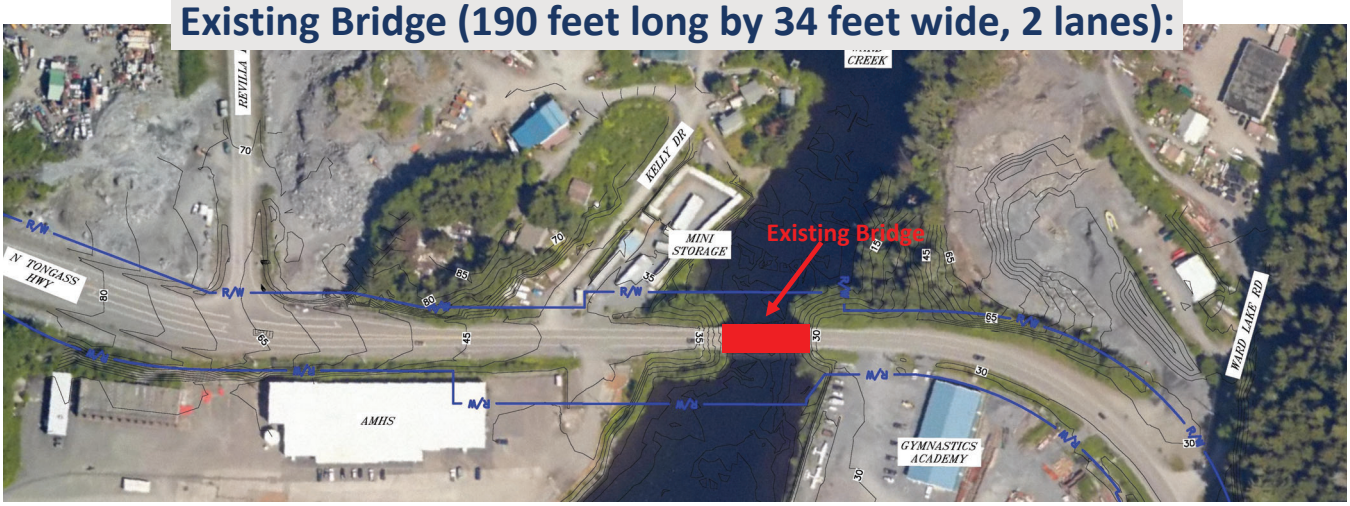
This project would:

- Replace the existing Ward Creek Bridge
- Reconstruct roadway approaches
- Replace guardrail
- Address embankment armoring

Station 3: Project Layout Concepts

Three project alignment design options were considered by the project team.

Existing Bridge (190 feet long by 34 feet wide, 2 lanes):



Options explored by the project team:

200 ft x 57 ft

- No space for sidewalks or future pedestrian underpass
- Impacts recreational watercraft access
- Impedes creek hydraulics

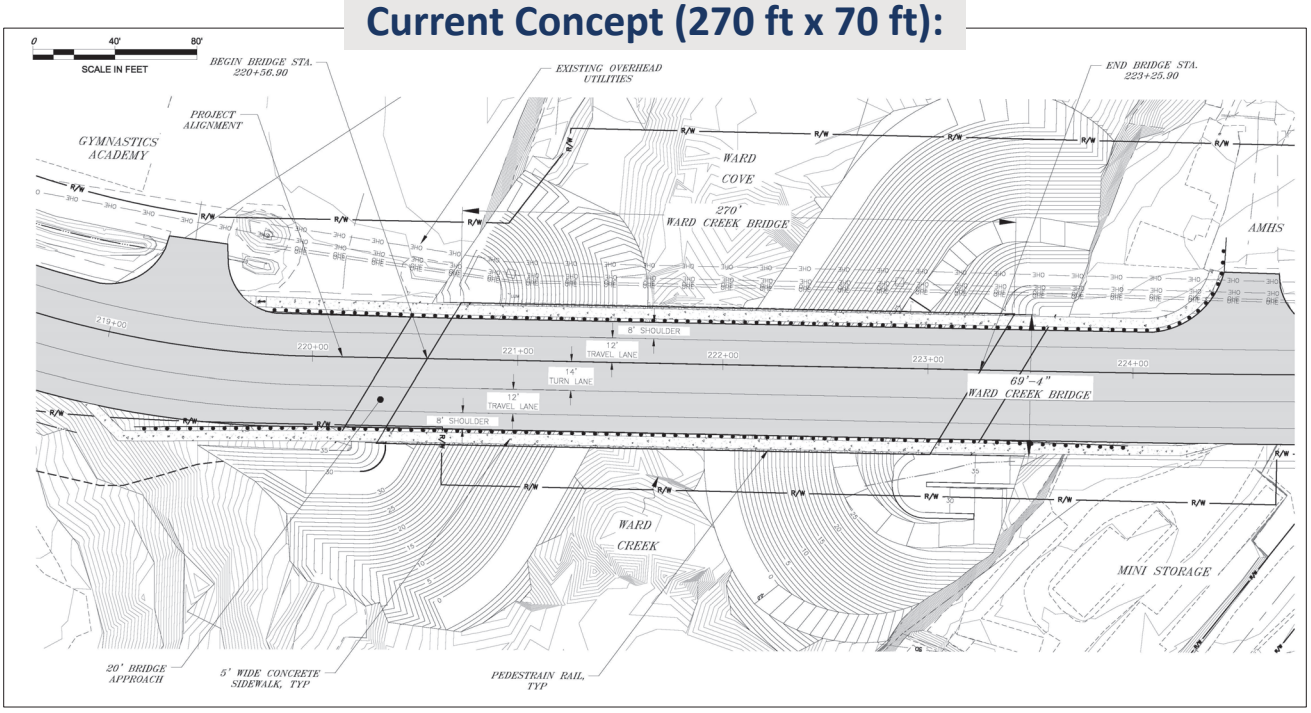
214 ft x 70 ft

- Space for sidewalks, but not for future pedestrian underpass
- Impedes creek hydraulics

270 ft x 70 ft (current concept)

- Pedestrian rails & sidewalks
- Allows for future pedestrian underpass
- Maintains access for recreational watercraft
- Uses hydraulically efficient orientation

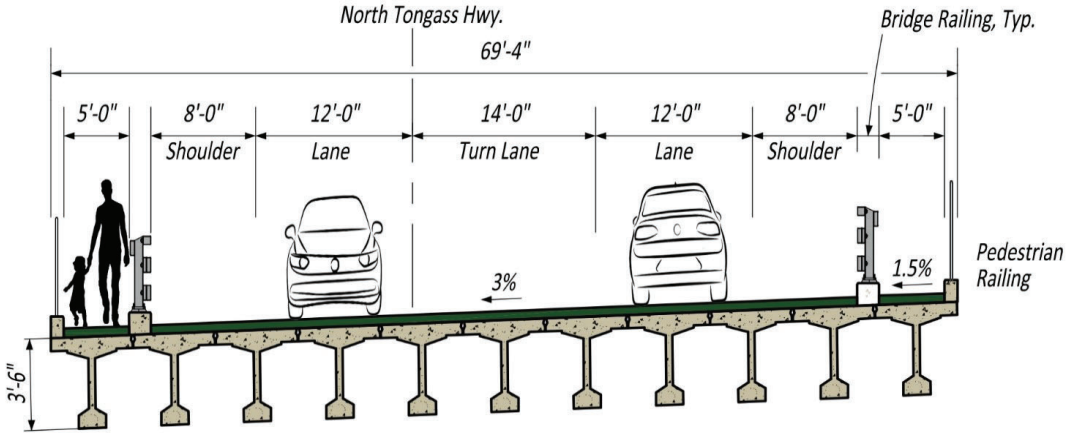
Current Concept (270 ft x 70 ft):



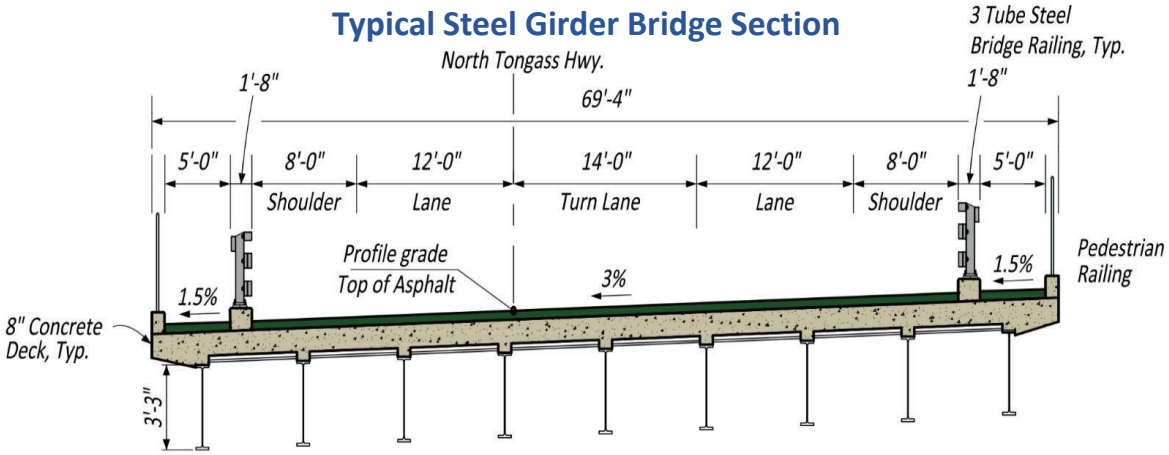
Station 4: Project Bridge Type Concepts

Three bridge types have been considered by the project team, including concrete girder, steel girder, and voided slab bridge types. The Concrete Girder bridge type was determined to be optimal for Ward Creek Bridge 747.

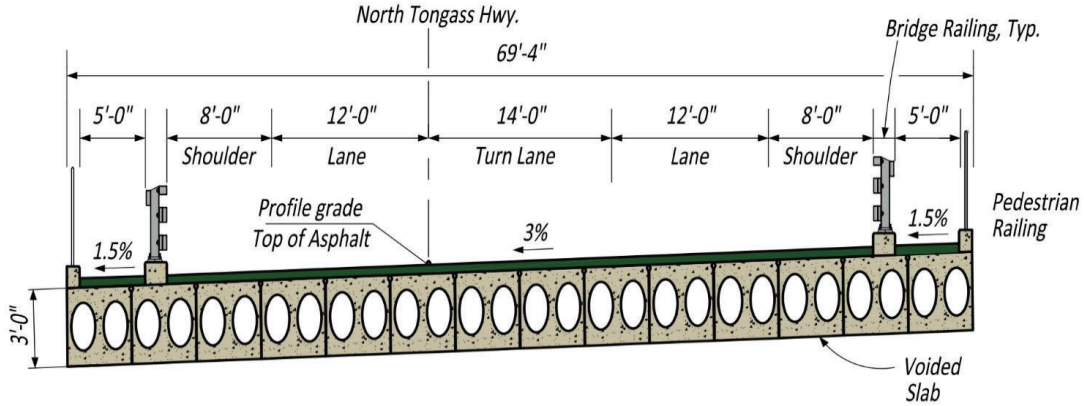
Typical Concrete Girder Bridge Section (Preferred Concept)



Typical Steel Girder Bridge Section



Typical Voided Slab Bridge Section



Station 5: Project Constraints

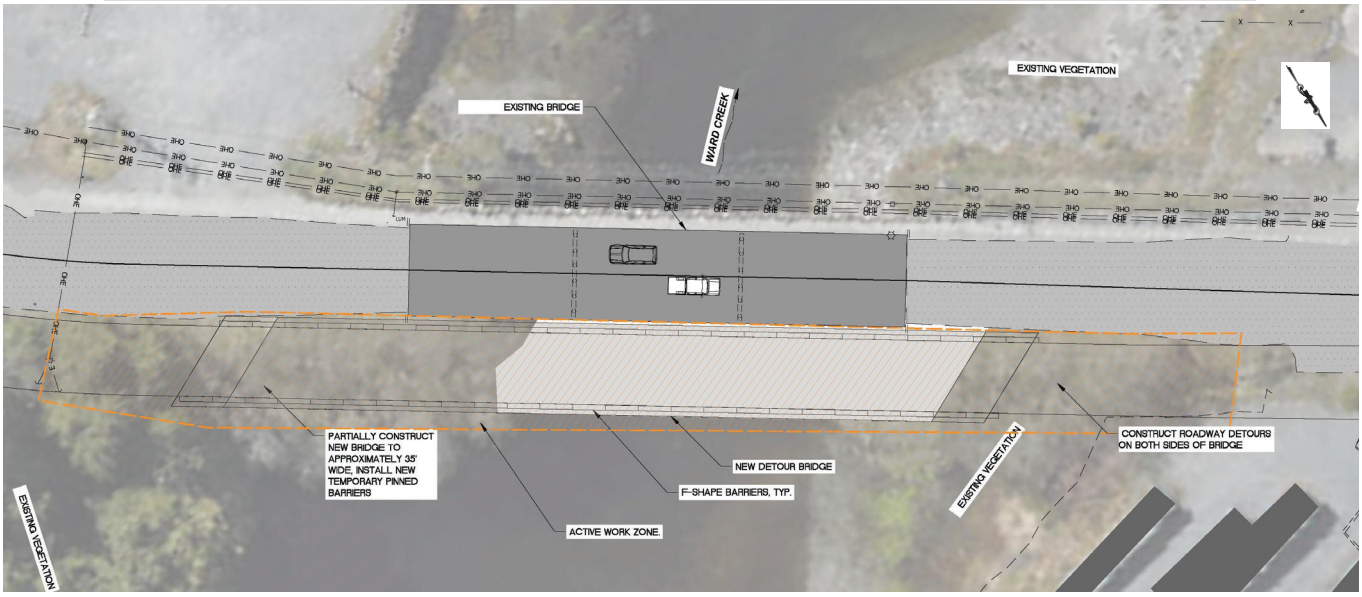
The project area is determined and limited geographically by a variety of constraints

Key Note	Description
A	High traffic corridor, esp. with cruise(s) in port
B	Heavy tourist bus traffic
C	Rock outcropping adjacent to highway
D	Steep, forested topography within project area
E	Adjacent property access and topography
F	Limited ROW, especially around bridge
G	Tidally influenced project area
H	Adjacent utilities, may require relocation
I	Environmentally sensitive area
J	Construction window limits due to A, B, and I

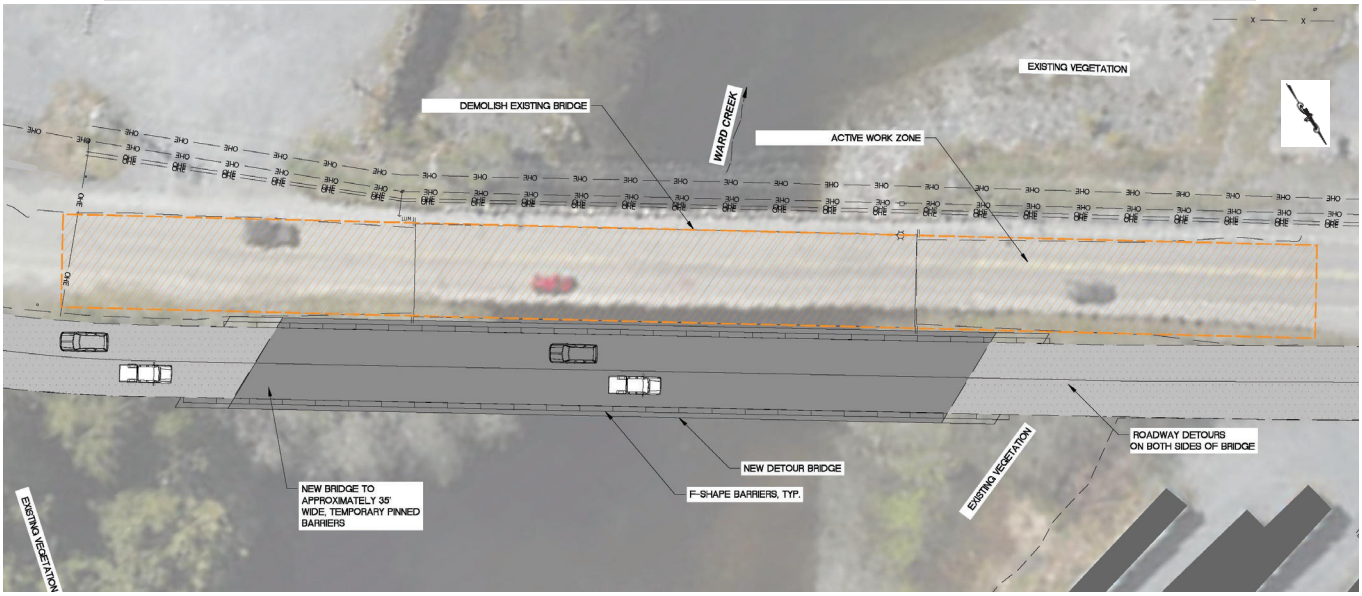
Station 6: Traffic Management

Bridge Construction will be refined as design progresses.
The project team will aim to maintain 2 lanes of traffic throughout construction, as shown in the phased approach below.

Phases I - II: Partial Demolition and Construction (2 lanes)



Phases III - IV: Complete Demolition & Construction (2 lanes)

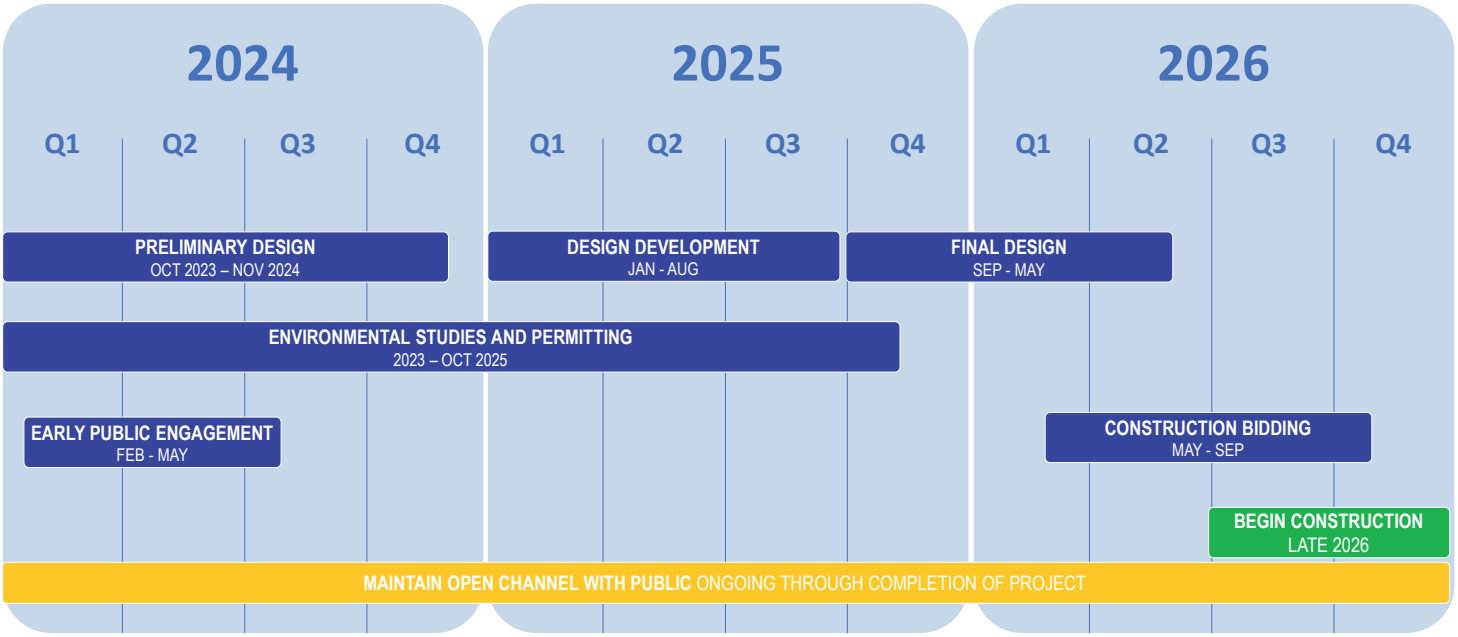


Single Lane (Flagger Operation) Traffic Wait Time Analysis

The project team is working to maintain two lanes of traffic as much as possible. However, single lane flagger operations would occasionally be required. These would be strategically timed to minimize delays.

	Volume condition		
Work zone speed	Low number of passengers at Ward Cove (less than 2,000)	Medium number of passengers at Ward Cove (2,000 to 3,000)	High number of passengers at Ward Cove (3,000 to 6,000)
45 mph	< 5 min	5 to 20 min	40 min to > 1 hour
35 mph	5 to 10 min	20 to 40 min	1 hour or more
25 mph	20 to 40 min	1 hour or more	> 1 hour

Station 7: Project Cost and Schedule



Project Budget: $20-30 million